sites into the AT&T network. *Id.* ¶ 67. For a variety of reasons discussed below, AT&T simply could not add [Begin Confidential Information] [End Confidential Information] new sites in anything close to the same period of time, or likely in the same advantageous locations, in the absence of this transaction. *Id.* ¶¶ 69, 72.

To add a site, a provider must locate a suitable and available location, arrange to acquire the site through purchase or lease, comply with regulatory requirements that necessitate extensive studies and consultation, apply for and obtain building permits and zoning approvals, contract with third-party vendors to purchase the needed equipment, construct the site and associated backhaul, and then integrate the site into the network. *Id.* ¶ 69-71. This process can literally take years. In the San Francisco/Bay Area market, for example, the zoning process *alone*—only a single step in this long, multi-step process—has taken AT&T an average of [Begin Confidential Information] [End Confidential Information] to complete. *Id.* ¶ 70.

Despite these obstacles, AT&T completed approximately [Begin Confidential Information] [End Confidential Information] new cell sites in 2010, which was less than the [Begin Confidential Information] [End Confidential Information] sites it budgeted for and pursued. Hogg Decl. ¶ 72.44 Thus, the [Begin Confidential Information]

[End Confidential Information] T-Mobile USA sites that AT&T could integrate represent more than *eight years* of new sites based on AT&T's 2010 rate. *Id.* ¶ 67. Nor are the delays inherent in the site addition process likely to diminish in the near future. To the contrary,

In some areas, AT&T's success rate in adding sites was even worse. In the [Begin Confidential Information] [End Confidential Information] metropolitan area, for example, AT&T completed only [Begin Confidential Information] [End Confidential Information] percent of the site additions that were planned that year. Hogg Decl. ¶ 72.

many municipalities face budget deficits and have fewer resources to process tower site applications even as the number of site applications has grown with the rollout of 4G services by multiple providers. Id. ¶ 71. At the same time, the pace of those other providers' site additions limits the available pool of engineering, vendor, and other resources AT&T needs in order to add cell sites of its own. Id. Id.

Delay is not the only reason that AT&T could not come close to replicating the cell density improvement resulting from this transaction. T-Mobile USA's sites are the product of years of effort to secure the best cell site locations. Some of T-Mobile USA's well-placed sites appear to be in locations where AT&T could not replicate them—for example, because of limited space. Hogg Decl. ¶ 68. Moreover, after years of aggressive cell-splitting activities to improve capacity, it has become increasingly difficult for AT&T to find suitable locations. *Id.* ¶ 69. Finally, adding sites is also extremely costly. Indeed, Commission staff has estimated that it would cost the industry \$174 *billion* to build enough cell sites to handle the expected demand growth between now and 2014 and has concluded that adding cell sites is not a feasible alternative to additional spectrum for dealing with growing mobile data demand. 46

Nor could AT&T simply lease space on these [Begin Confidential Information]

[End Confidential Information] T-Mobile USA sites in the absence of this transaction. Even if

T-Mobile USA owned a given cell tower and wished to explore such a leasing arrangement,

There is no merit to speculation that AT&T could add more sites faster by relying on third-party tower companies. See Spencer Ante & Amy Schatz, Skepticism Greets AT&T Theory, Wall St. J. (Apr. 4, 2011). AT&T already has pursued that course with vigor, and many of the sites it adds involve third-party tower companies. But such companies often do not have towers in the locations where AT&T faces congestion and needs to add a site. Indeed, in many cases where AT&T works with a tower company, the tower company itself needs to build a new tower, thus encountering many of the same obstacles outlined above.

FCC Technical Paper No. 6, at 21.

many of those sites may not have space or the structural reinforcement needed for two carriers' equipment. After this transaction, by contrast, the combined company will integrate the sites into a single network with only one set of equipment and multi-band antennas.

## b) Deployment of DAS and Wi-Fi

Nor can outdoor distributed antenna systems and Wi-Fi hotspots (and Hotzones) achieve the same nationwide efficiencies as the merger, even if they are coupled with other available measures to increase efficiency and manage capacity. AT&T's experience is that Wi-Fi provides less meaningful capacity relief than a cell site and, of course, is limited to small areas. Hogg Decl. ¶ 73. Distributed antenna systems likewise provide meaningful traffic offload only in areas with extremely high user densities, such as convention centers, stadiums, and universities. *Id.* And even then, they are extremely expensive to deploy, costing on average [Begin Confidential [End Confidential Information] more than an equivalent Information] cell split and over [Begin Confidential Information] [End Confidential Information] more than adding a carrier to an existing cell site. Id. Further, deployment of DAS can be subject to permitting and construction delays similar to those affecting new cell site additions. Id. At best, both Wi-Fi and DAS offer highly localized solutions for areas much smaller than those served by a cell site and cannot solve the systemic capacity issues that AT&T and T-Mobile USA confront. Id. 47

## c) Redeploying existing spectrum

It would also be exceptionally difficult, if not impossible, for AT&T to repurpose its existing spectrum quickly enough to alleviate the capacity crunch it faces. As noted above,

While AT&T also has added femtocells to its networks, these are designed primarily to address in-home coverage issues rather than to increase network capacity and, accordingly, do not constitute a workable solution to capacity problems in most cases. Hogg Decl. ¶ 73.

AT&T must continue to support tens of millions of GSM and UMTS subscribers. These embedded users have handsets that work only in particular bands and with particular technologies, limitations that severely constrain AT&T's ability to repurpose the spectrum those customers use. And existing customers generally will not transition quickly from one technology or frequency band to another, because doing so requires them to give up their existing handsets. Based on AT&T's experience, it can take years for subscribers to migrate to new technologies in volumes sufficient to provide material offload from the legacy network. Hogg Decl. ¶ 27. As discussed, AT&T also cannot use its existing AWS and 700 MHz spectrum to alleviate capacity constraints, since that spectrum is needed for LTE services that AT&T is deploying. Indeed, because LTE is more spectrally efficient than GSM and UMTS, it would be a significantly *less* efficient use of spectrum to divert AWS and 700 MHz spectrum from LTE to these older technologies.

Nor can AT&T address its short-term capacity challenges with the spectrum it is purchasing from Qualcomm. That spectrum is only "unpaired" (one-way). Moore Decl. ¶ 25. Although technological advances will allow unpaired spectrum to be integrated into two-way wireless technologies to supplement downlink capacity, the technical specifications for doing so in LTE will not be developed until 2012, and equipment manufacturers will then need substantial time to design, test, and build the relevant equipment. As a result, this spectrum likely will not be available until 2014 at the earliest.<sup>48</sup>

Moore Decl. ¶ 25. AT&T's existing WCS spectrum holdings cannot be used for this purpose either, because the technical rules for the WCS band, such as limits on the power spectral density limits, make it infeasible to use that band for broadband service. See AT&T Petition for Partial Reconsideration, WT Docket No. 07-293, at 13-20 (filed Sept. 1, 2010). And the spectrum that AT&T acquired in 2010 as a result of divestitures in the Verizon/Alltel transaction primarily expanded AT&T's footprint to cover areas where it previously had not

## d) Adding spectrum through purchase or lease

AT&T and T-Mobile USA also have no feasible near-term sources of additional spectrum that would solve the problem. Although the Commission has identified spectrum it hopes to free up for commercial use, the Commission staff has observed that "new spectrum has historically taken between six and thirteen years to make available[.]" That will be too late to solve the provider-specific challenges that AT&T and T-Mobile USA confront today. For example, the broadcast spectrum that the Commission proposes to make available for broadband use through incentive auctions will require passage of new federal legislation, an FCC rulemaking, the occurrence of the auction process itself, clearance of the spectrum, and deployment of the needed equipment. Recent experience teaches that these steps take many years and proceed with extreme unpredictability. Moore Decl. ¶ 23; Larsen Decl. ¶¶ 33-35. AT&T certainly cannot count on this process to resolve its growing capacity constraints today.

Nor can AT&T find an adequate solution by acquiring spectrum that has already been licensed to other mobile providers. AT&T is sometimes able to purchase small blocks of spectrum in selected areas, but that is at most a localized and short-term solution. Moore Decl. ¶ 24. Also, AT&T often cannot feasibly make use of other providers' spectrum because its existing network equipment and customers' handsets will not operate on it. *See id.* ¶ 22; Hogg Decl. ¶ 16 n.4; Carlton Decl. ¶ 33.

For similar reasons, spectrum leased from wholesale providers such as Clearwire or LightSquared cannot address AT&T's mounting capacity constraints. Among other limitations,

owned a network. Because there was very little overlap, the transaction provided no relief for AT&T's capacity challenges. Hogg Decl. ¶ 33 n.13.

<sup>49</sup> FCC Technical Paper No. 6, at 26.

AT&T (like T-Mobile USA) has a large embedded base of subscribers whose existing handsets would not work on those providers' spectrum bands or with their technologies. This transaction presents an efficient solution in part because it *avoids* that problem: AT&T and T-Mobile USA use compatible GSM spectrum that will not require immediate handset replacements for existing subscribers. In contrast, Clearwire or LightSquared spectrum may well offer reasonable solutions for carriers like MetroPCS or Leap, but only because they can put it to a quite different use. Unlike AT&T, which needs additional spectrum to relieve congestion on *existing* service bands serving millions of current customers, MetroPCS and Leap can look to Clearwire and LightSquared to deploy a new generation of service over a new generation of handsets. More generally, as Professor Carlton points out, LightSquared, Clearwire, and the companies that use their spectrum "can 'leapfrog' existing carriers by deploying 'next generation' technologies without needing to dedicate spectrum and network assets to serving existing subscribers." Carlton Decl. ¶ 76; see also id. ¶ 106.

## 7. In Addition To Network-Capacity-Oriented Synergies, the Transaction Will Also Create Substantial Cost Synergies.

AT&T projects that this transaction will generate cost savings and other synergies that ultimately exceed the purchase price of \$39 billion, with an annual run rate on the order of \$3 billion from year three onward. Moore Decl. ¶ 32. These cost synergies are based on standard discounted cash flow analysis, and are described in greater detail in the attached declaration of AT&T Senior Vice President of Corporate Development Rick Moore.

To take one example, even as AT&T integrates thousands of T-Mobile USA's cell towers to enhance the efficiency of the combined network, it can also decommission thousands of surplus sites, generating substantial costs savings from elimination of leases, utilities,

maintenance, and other site-related expenses. Moore Decl. ¶ 34. AT&T will also be able to reuse equipment from these decommissioned sites to enhance network coverage and performance in other locations, resulting in additional savings. 50 *Id.* Further savings will arise from a reduction in interconnect and toll expenses as a result of switching to AT&T where possible for transport. *Id.* 

The combined company will also be able to take advantage of scale efficiencies by, for example, optimizing its retail and distribution network. Moore Decl. ¶ 35. And the company will be able to combine customer support and billing functions to generate additional annual savings. *Id.* ¶ 37. The transaction will further generate purchasing efficiencies when the combined company procures customer equipment such as handsets as well as network equipment and infrastructure. *Id.* ¶¶ 35-36. The transaction will also enable the combined company to reallocate capital expenditures that the individual companies would have been required to make over the next few years in attempting to address some of their respective capacity issues, including capital to build out infrastructure and acquire spectrum on the secondary market. *Id.* ¶ 36.

Consumers will benefit as the combined company realizes these cost reductions. As Professor Carlton explains, reductions in marginal costs (such as customer acquisition costs) create incentives to expand output and reduce prices to consumers. Carlton Decl. ¶ 67. But that is also true of fixed cost savings in an industry, like this one, that is operating near capacity and faces high costs to expand output. In that situation, all such costs—"including those typically considered 'fixed' in an accounting sense—are properly thought of as variable because they must

AT&T will likely make the remaining equipment and towers (if the company owns them) available for sale to other providers.

be incurred in order to serve additional subscribers." *Id.* As Professor Carlton concludes, the synergies created by combining these two companies will reduce the "fixed costs" of expanding output and will thus increase the combined company's economic *incentives* to expand output, all to the benefit of consumers. *Id.* 

Finally, AT&T has a strong track record of realizing synergies from prior transactions.

See Moore Decl. ¶¶ 38-42. In these prior acquisitions, AT&T not only gained experience in how to integrate operations, but also met or exceeded key targets for synergies and cost savings while delivering significant customer benefits. For example, within just a few years of Cingular's acquisition of AT&T Wireless, the combined company had lowered costs in areas such as network infrastructure, sales and marketing, and billing and information systems; dramatically expanded its 3G footprint; improved Cingular's customer retention; and launched new innovative devices and products. Id. ¶ 39. The SBC-AT&T Corp. merger further illustrates AT&T's ability to execute merger integrations successfully. While SBC had estimated in January 2005 that the net present value of merger synergies from that transaction would be \$15 billion, it was able to increase that forecast one year later to approximately \$18 billion. Id. ¶ 40. And from 2006 through 2008, actual synergy savings exceeded expectations in a variety of areas, including network planning and engineering, information technology, and procurement. Id. AT&T likewise exceeded forecasted synergy savings in a number of categories in its acquisition of BellSouth. Id. ¶ 41.

- B. This Transaction Will Strongly Advance the Nation's Broadband and High Tech Goals.
  - 1. This Transaction Gives the Combined Company the Necessary Scale, Scope, Resources, and Spectrum to Deploy LTE to More than 97 Percent of Americans, Thereby Stimulating Economic Growth and Thousands of Jobs.

As a result of this transaction, AT&T can increase its LTE deployment from 80 to more than 97 percent of the U.S. population. That deployment will mark a quantum leap towards meeting the Administration's rural broadband deployment objectives—without any expenditure of public funds.

In his State of the Union address, President Obama noted the strategic importance of broadband in "winning the future" by "encouraging American innovation" and maintaining our global competitiveness. Central to the President's message was the fundamental importance of widespread broadband availability. He vowed to "make it possible for businesses to deploy the next generation of high-speed wireless coverage" throughout America, not only to produce a "faster Internet" and "fewer dropped calls," but also to "connect[] every part of America to the digital age." The benefits of this private investment, he added, will be diverse and immense: "farmers and small business owners will be able to sell their products all over the world," firefighters "can download the design of a burning building onto a handheld device," rural students can "take classes with a digital textbook," and a patient in a remote area "can have face-to-face video chats with her doctor." These private investments, he concluded, "will make

Obama 2011 State of the Union Address, supra.

<sup>&</sup>lt;sup>52</sup> *Id*.

<sup>&</sup>lt;sup>53</sup> *Id*.

America a better place to do business and create jobs."<sup>54</sup> In February 2011, the President followed up on this pledge by announcing the Wireless Innovation and Infrastructure Initiative, which takes steps to extend the 4G revolution to rural areas and bring them fully within the 21st century economy.<sup>55</sup>

This Commission has likewise recognized that "[b]ringing ubiquitous and affordable broadband services to rural America will improve the quality of education, healthcare, and public safety in rural America, among other benefits. On a larger scale, ensuring that all Americans, including those in rural areas, have access to such services will help to improve America's economy, its ability to compete internationally, and its unity as a nation."

AT&T's 97 percent LTE deployment will help the U.S. meet these critical priorities.

AT&T's current (pre-merger) plans call for deployment of LTE to approximately 80 percent of the U.S. population but no more. *See* Moore Decl. ¶¶ 5, 13. The remaining 20 percent of the population generally lives in less populated areas, including rural and smaller communities, where economies of scale and density are very low and per-customer costs are very high. And in some of these areas, AT&T simply lacks the spectrum necessary to deploy LTE. *See* Section I.A, *supra*. This transaction, however, will give AT&T the scale, scope, resources, and spectrum

<sup>&</sup>lt;sup>54</sup> *Id.* 

The White House, *President Obama Details Plan to Win the Future through Expanded Wireless Access* (Feb. 10, 2011), http://www.whitehouse.gov/the-press-office/2011/02/10/president-obama-details-plan-win-future-through-expanded-wireless-access.

Federal Communications Commission, *Bringing Broadband to Rural America: Report on Rural Broadband Strategy* at 8, ¶ 15 (May 22, 2009); *accord National Broadband Plan*, at 5, 227, 269.

See Federal Communications Commission, OBI Technical Paper No. 1: The Broadband Availability Gap, at 40 (Apr. 2010), http://download.broadband.gov/plan/the-broadband-availability-gap-obi-technical-paper-no-1.pdf.

it needs to increase its LTE deployment from 80 percent to more than 97 percent of the U.S. population.

This initiative means, in practical terms, that AT&T will provide LTE to approximately 55 million more people than under its current plans and more than an additional million square miles, which equates to more than one-third of the land mass of the contiguous United States. Much of this additional service will be provided in rural areas and will thus give rural residents access to efficient, fast, and reliable broadband connections that they might otherwise lack altogether. And even in locations where another provider has already deployed LTE, AT&T's deployment will provide, at a minimum, key additional competition.

The LTE and other deployment initiatives this transaction makes possible will spur additional broadband investment, jobs, and economic growth worth billions of dollars in all areas of the country. One study concludes that "[a]nnualized investment in 3G wireless and satellite technologies from 2003 to 2009 was \$11.6 billion, which corresponds to 168,300 jobs created." Chairman Genachowski has likewise recognized that 4G investment can spur hundreds of thousands of new U.S. jobs. And Lawrence Summers, then head of the President's National Economic Council, stated in 2010 that "[e]ach dollar invested in wireless deployment is estimated to result in as much as \$7 to \$10 higher GDP," and that as wireless investment grows, "the benefits for job creation and job improvement are likely to be substantial."

Robert W. Crandall & Hal J. Singer, *The Economic Impact of Broadband Investment*, Broadband for America, at 2 (2010) (emphasis omitted).

Genachowski CTIA Remarks, at 9 (citing estimate of the High Tech Spectrum Coalition: "[O]ver the next five years, investments in 4G wireless technologies will create 205,000 US jobs, assuming our spectrum infrastructure can handle 4G demand.").

<sup>60</sup> Summers Remarks, supra.

This transaction will create precisely those "benefits for job creation and job improvement." In addition, because AT&T is the only unionized major wireless company, this transaction will bring jobs with union wages and benefits. That is one reason why this transaction has drawn strong support from the Communications Workers of America and the AFL-CIO.<sup>61</sup> And the success of AT&T's best-in-class supplier diversity program, <sup>62</sup> along with the benefits of LTE for communities of color (discussed below), are key reasons why civil rights groups including the NAACP and the Hispanic Institute have highlighted the transaction's potential to significantly expand the opportunities for minority consumers and businesses to participate in our country's broadband economy.<sup>63</sup>

See CWA, AT&T/T-Mobile Deal Will Benefit Workers and Build Out Broadband (Mar. 24, 2011) ("AT&T's acquisition of T-Mobile USA is good news. AT&T will build out broadband to provide service to 95 percent of the country and workers at T-Mobile will benefit from a management record of neutrality in organizing. The merger of AT&T and T-Mobile spectrum will improve AT&T's network and quality, along with the job security of CWA members."), http://www.cwa-union.org/news/entry/att\_t-mobile\_deal\_will\_benefit\_workers\_ and\_build\_out\_broadband; see also Statement by AFL-CIO President Richard Trumka on Announced Acquisition of T-Mobile USA by AT&T (Mar. 22, 2011), www.speedmatters.org.

See AT&T's Global Supplier Diversity Website, http://www.attsuppliers.com/sd/. See also AT&T Receives High Marks from Diversity Inc. (Mar. 7, 2011), http://www.att.com/gen/press-room?pid=19272&cdvn=news& newsarticleid=31668&mapcode=corporate|community.

For example, the NAACP states: "AT&T's acquisition of T-Mobile has the potential to benefit consumers, communities and workers alike. AT&T has scored among the highest ranked in the telecommunications industry for its commitment to diversity in terms of procurement, philanthropy, promotion and hiring among other criterion at the federal, state and local levels . . . . We are hopeful that this acquisition will further advance increased access to affordable and sustainable wireless broadband services and in turn stimulate job creation and civic engagement throughout our country." Letter from Hilary O. Shelton, Director, Washington Bureau and Senior Vice President for Advocacy and Policy, NAACP, to Marlene Dortch, FCC, at 1 (Apr. 18, 2011); The Hispanic Institute Announces Support for Proposed Merger of AT&T and T-Mobile (Mar. 21, 2011) ("The proposed merger of AT&T and T-Mobile will move us closer to universal mobile broadband deployment. When we consider how essential mobile technology is to empowering communities, we conclude that this proposal is good for Hispanic America."), http://www.thehispanicinstitute.net/node/3690.

This more than 97 percent LTE deployment will further create long-term benefits for the affected communities that far transcend the immediate economic stimulus. LTE will bring especially significant benefits to residents of rural areas and smaller communities, where the benefits of real-time video and similar capabilities are most urgently needed to fill gaps in physical infrastructure for healthcare, education, and other social needs. For example, LTE's uniquely low latency rate provides better support for delay-sensitive online applications such as distance learning (which involves real time interaction between students and teachers), video conferencing, remote medical monitoring, real-time patient examinations by doctors in multiple locations, and complex gaming systems played simultaneously by thousands of users. *See, e.g.*, Donovan Decl. ¶ 29.

In addition, LTE's state-of-the-art broadband performance will create a virtuous cycle of investment and innovation in cloud computing. With increased spectrum and higher bandwidth speeds, more information and processing power can be transferred to the "cloud"—i.e., to Internet-based servers running sophisticated programs that end users can use on demand through their broadband connections. See Donovan Decl. ¶ 6, 30-32. As a result, wireless devices will become dramatically more useful to consumers even as—with the transfer of many computing responsibilities to the cloud—those devices become thinner, lighter, and able to support far longer battery life. These advances can also facilitate embedding wireless connectivity in a wide variety of consumer and business devices, with usage and other capabilities monitored and controlled from the cloud. Cloud computing depends, however, on rapid transfers of data between wireless devices and the cloud. Because LTE is uniquely efficient in handling those data transfers, broader LTE coverage will support the shift towards cloud-based services for business and consumers and ensure in particular that rural areas are not left behind. As

Chairman Genachowski recently observed, "[a] thriving global cloud computing industry, built on ubiquitous broadband, can be as beneficial for economic growth in the 21st century as electricity was in the 20th."<sup>64</sup>

AT&T's massive LTE deployment will also help close the digital divide. As a group of sixteen prominent civil rights organizations has explained in filings with the Commission, "[d]ue in part to the relative affordability of wireless offerings, wireless broadband has been a real success story for minorities." Indeed, according to numerous studies, "wireless is the only broadband technology for which minority adoption and use currently indexes at higher levels than for White Americans." A report by the Pew Internet & American Life Project, for example, found that "African Americans are the most active users of the mobile internet—and their use of it is also growing the fastest. This means the digital divide between African Americans and white Americans diminishes when mobile use is taken into account." The Pew

Remarks of FCC Chairman Julius Genachowski, *The Cloud: Unleashing Global Opportunities*, Aspen IDEA Project, at 8 (Mar. 24, 2011), http://hraunfoss.fcc.gov/edocs\_public/attachmatch/ DOC-305399A1.pdf.

Comments of the National Organizations, GN Docket No. 09-191, at 10 (Jan. 14, 2010) (including joint comments from ASPIRA Association; Black College Communications Association; Hispanic Institute, Hispanic Technology and Telecommunications Partnership, Labor Council for Latin American Advancement; Latinos in Information Sciences and Technology Association; Lawyers' Committee for Civil Rights Under Law, League of United Latin American Citizens; MANA, A National Latina Organization; National Association of Black County Officials; National Black Caucus of State Legislators; National Conference of Black Mayors; The National Coalition on Black Civic Participation-Black Women's Roundtable; National Organization of Black Elected Legislative Women; National Puerto Rican Coalition; United States Hispanic Chamber of Commerce).

<sup>66</sup> *Id.* at 9-12.

John Horrigan, *Pew Internet & American Life Project: Wireless Internet Use*, at 4 (July 2009), http://www.pewinternet.org/~/media//Files/Reports/2009/Wireless-Internet-Use-With-Topline.pdf.

report also found similar trends among Hispanic users of mobile broadband services. As Commissioner Clyburn recently pointed out, the African American and Hispanic communities have "excelled" in their adoption of mobile broadband services, and both groups "take advantage of a much wider array of their phones' data functions than their white counterparts."

AT&T's LTE initiative will thus be a key part of keeping these and other minority groups on the leading edge of the broadband revolution. Because LTE technology, unlike its predecessors, operates on a par with some of today's wireline broadband platforms, LTE can play a particularly important role in the advancement of minority communities. That is why the Hispanic Institute, consistent with the experience of other minority advocates, notes that "mobile broadband access has become a key resource to help many Hispanics succeed and thrive in today's economy. From improving health care to increasing educational opportunities and access to government resources, wireless devices, services and applications offer Hispanics a new route to take a full advantage of many life-enhancing resources." The National Coalition on Black Civic Participation has similarly pointed out that the wider availability of wireless broadband services will enhance entrepreneurial opportunities for minority- and women-owned businesses.

<sup>68</sup> *Id.* at 18.

Remarks of FCC Commissioner Mignon L. Clyburn, National Conference for Media Reform, Boston, MA (Apr. 8, 2011), http://www.fcc.gov/Daily\_Releases/Daily\_Business/2011/db0408/DOC-305663A1.pdf.

The Hispanic Institute & Mobile Future, *Hispanic Broadband Access: Making the Most of the Mobile, Connected Future*, at 4 (Sept. 15, 2009), http://www.thehispanicinstitute.net/files/u2/Hispanics\_and\_Broadband\_Access\_0.pdf.

Letter from Joycelyn Tate, Telecommunications Policy Advisor, National Coalition of Black Civic Participation – Black Women's Roundtable, to Marlene Dortch, FCC, GN 09-51 (Feb. 25, 2010).

In light of all these many benefits that mobile broadband holds for minorities, leading civil rights organizations have recognized the importance of "encourag[ing] investment" in wireless broadband networks and services so that "future generations of Americans, across every demographic" can participate fully in our digital society.<sup>72</sup> By building out LTE to more than 97 percent of the U.S. population, AT&T will be bringing that vision a big step closer to reality.

In sum, the benefits of this deployment will not end once the LTE platform is deployed. Investment in broadband infrastructure generates dynamic economic and social value that can dramatically improve consumer welfare for years to come. LTE service will provide millions of Americans with better healthcare, greater educational and economic opportunities, and stronger engagement in civic life. As the Commission has recognized, ubiquitous, dependable and affordable broadband has become a "foundation for economic growth, job creation, global competitiveness and a better way of life." This transaction will help achieve that national priority.

## 2. The Transaction Will Help Preserve America's Global Leadership in Mobile Broadband Innovation.

As the National Broadband Plan explains, a core Administration objective is to keep America "lead[ing] the world in mobile innovation, with the fastest and most extensive wireless networks of any nation."<sup>74</sup> The U.S. leads innovation in areas throughout the mobile broadband ecosystem, from networks to operating systems to mobile applications. That leadership arises

See, e.g., Minority Media and Telecommunications Council Reply Comments, GN Docket No. 09-157, at 3 (Nov. 5, 2009).

<sup>73</sup> National Broadband Plan, at xi.

<sup>74</sup> *Id.* at xiv.

from a complex, virtuous cycle of innovation, in which network providers play a critical role, This transaction will help maintain that global leadership.

AT&T, in particular, has long played a central role in mobile broadband innovation.

AT&T Labs is a world-class research institution that supports more than a thousand scientists and engineers, and AT&T earned more than 1,000 patents in 2010 alone. Donovan Decl. ¶ 5. Its innovations have spanned the entire wireless ecosystem from network standards to speech-recognition software. To take just one example, AT&T is a world leader in the deployment of wireless broadband networks using UMTS standards. *See id.* ¶ 19.

In this and many other respects, the innovations of wireless providers in general and AT&T in particular have triggered broader ecosystem innovations, responses, and further innovations. To win customers, wireless providers are constantly innovating to improve their mobile platforms, which, in turn, prompts others to deploy ever more innovative devices and applications. As customers adopt new devices and applications, demand for wireless service increases, thus spurring network operators to enhance their networks still further. Improved networks spur more improved devices and applications, which in turn spur still-better networks, and so on in a "virtuous cycle" of innovation. See id. ¶14.

Again, however, "there's a catch. . . . [W]hile American ingenuity and our appetite for wireless technology is limitless, spectrum is not. And the coming spectrum crunch threatens American leadership in mobile and the benefits it can deliver to our country." As discussed, that spectrum crunch is hitting AT&T harder and sooner than the industry at large. And because AT&T plays a key role in supporting the cycle of mobile broadband innovation in the United States, its capacity problems could have ripple effects throughout the broadband ecosystem. By

<sup>&</sup>lt;sup>75</sup> Genachowski CTIA Remarks at 5-6.

efficiently addressing those constraints before they prevent AT&T from helping support the next generation of innovative mobile services and applications, this transaction will be good not only for AT&T and its customers, but for America's high tech sector as a whole. Donovan Decl. ¶¶ 12-16.

## C. The Transaction Will Enhance Public Safety.

Disaster preparedness has become a national imperative,<sup>76</sup> and AT&T has responded with best-in-class preparedness capabilities.<sup>77</sup> Over the last decade, AT&T has devoted unparalleled resources to America's need for effective communications in emergencies, including mobile command centers, portable cell sites known as Cells on Wheels (COWs) or Cells on Light Trucks (COLTs), a fleet of mobile generators, and mechanisms for linking mobile cell sites to satellites when landline connections go down.<sup>78</sup> These resources are pre-positioned around the nation and can be deployed on short notice to areas struck by emergencies. AT&T's disaster preparedness teams also have highly specialized capabilities to restore communications in the event of incidents involving chemical, biological, radiological, and other hazardous materials.

AT&T's response to Hurricane Ike in 2008 illustrates its emergency-preparedness capabilities.<sup>79</sup> When Ike struck Galveston, AT&T deployed 500 portable generators to power its cell sites and set up five mobile cell sites in the area. AT&T doubled the capacity of its 3G network in the Galveston area during the hurricane to ensure that emergency personnel had

See The White House, The Federal Response to Hurricane Katrina: Lessons Learned, at 3 (2006), available at http://www.whitehouse.gov/reports/katrina-lessons-learned.pdf.

See AT&T, Network Disaster Recovery, http://www.corp.att.com/ndr/.

See AT&T, Network Disaster Recovery, Deployment History, http://www.corp.att.com/ndr/deployment1.html.

See AT&T, Network Disaster Recovery, Deployments: Hurricane Ike – Galveston Island, http://www.corp.att.com/ndr/deployment\_2008\_09\_galveston.html.

reliable connectivity, and emergency personnel, Red Cross relief workers, and insurance claims adjusters could thus connect their laptops to AT&T's 3G network for data services. AT&T also dedicated a team of its employees to travel around the area with emergency personnel teams to ensure that they had the communications tools needed to respond effectively to situations as they developed. In total, AT&T deployed more than 3000 technicians and 200 construction contractors to restore communications to the Galveston area.

This transaction will enable AT&T to build on its strong track record for disaster preparedness by expanding the infrastructure and spectrum resources from which it can draw during emergencies. T-Mobile USA also has an excellent track record of disaster recovery and response over many years, as demonstrated during Hurricane Katrina in 2005. T-Mobile USA additionally has significant disaster response equipment deployed across the nation, including a large fleet of mobile generators and mobile cell site equipment. AT&T's and T-Mobile USA's combined emergency-preparedness initiatives will provide customers with more robust disaster recovery capabilities than they would receive in the absence of this transaction.

#### II. THE TRANSACTION WILL PRESERVE AND PROMOTE COMPETITION.

The U.S. wireless marketplace is extremely competitive. By freeing the applicants from their output-suppressing capacity constraints, this transaction will leave the marketplace more dynamic and competitive than before, and the beneficiaries will be American consumers.

See Press Release, T-Mobile USA, T-Mobile Gulf Coast Wireless Network Coverage at or Near Normal Levels (Sept. 7, 2005), http://newsroom.t-mobile.com/articles/t-mobile-restore-hurricane-Katrina-1; Press Release, T-Mobile USA, T-Mobile Store Lets Katrina Victims Place Free Phone Calls (Sept. 15, 2005), http://www.mobiledia.com/news/36374.html; Ed Oswald, T-Mobile Opens Wi-Fi to Katrina Victims, Betanews (Aug. 31, 2005), http://www.betanews.com/article/TMobile-Opens-WiFi-to-Katrina-Victims/1125506464.

## A. The U.S. Wireless Marketplace Is Exceptionally Dynamic and Competitive.

By a broad range of metrics, the mobile marketplace ranks among the most dynamic and competitive sectors of the American economy:

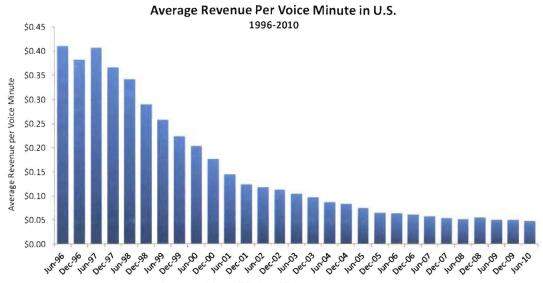
*First*, industry output has been exploding. As discussed in Section I.A above, American consumption of wireless network capacity has increased many times over since 2007, and will increase many times over again by 2015, all at an accelerating pace.

Second, just as quantity has increased, so too has the paradigm-shattering dynamism of wireless services. As the Chairman observes: "In just a matter of years, those brick [1G] phones have evolved into 4-ounce mini-computer smartphones" with "more computing power than NASA's lunar module"; mobile broadband applications rank among "the most remarkable forces for economic opportunity and quality of life that we've ever seen"; "[r]obust networks and powerful devices are allowing us to do all kinds of things we could barely have imagined a few years ago"; and "[i]t's hard to imagine an industry that's produced more game-changers than the wireless industry."

Third, wireless prices have been falling across the board for many years, amid "industry consolidation" that enabled providers to "exploit economies of scale" and thereby "offer more wireless services for similar or lower prices." For example, the average revenue per voice minute has fallen from approximately 41 cents in June 1996 to less than a nickel in June 2010:

Genachowski CTIA Remarks, at 2, 4.

GAO, Telecommunications: Enhanced Data Collection Could Help FCC Better Monitor Competition in the Wireless Industry, at 24 (July 2010) ("GAO 2010 Report"); see Carlton Decl. ¶ 15.



Source: Figures based on application of FCC methodology to CTIA data; FCC, Fourteenth CMRS Competition Report, Table 19, pp.112-114; CTIA, CTIA's Wireless Industry Indices Mid-Year 2010 Results, November 2010: Table 34, p. 94; Table 35, p. 95; Table 52, pp. 121-122; Table 78, pp. 187-88; Table 86, pp. 204-205.

As the GAO confirmed last year, "the overall average price (adjusted for inflation) for wireless services declined each year from 1999 to 2008," and "the average price for wireless service in 2009 was approximately 50 percent of the price in 1999."83 Average industry revenue per text message fell even faster—by more than 70 percent between 2005 and 2008 (from \$0.037 to \$0.011).84 And the quantity-adjusted price of a wireless broadband plan, measured by average revenue per megabit, has plummeted most dramatically of all. For example, AT&T's average revenue for one megabyte of data service has dropped almost [Begin Confidential Information] [End Confidential Information] percent since 2007 (Carlton Decl. ¶ 17):

<sup>83</sup> GAO 2010 Report, at 24.

Fourteenth Wireless Report, 25 FCC Rcd at 11532 ¶ 192.

## [Begin Confidential Information]

## [End Confidential Information]

Fourth, providers are not resting on today's successes, but are constantly investing in advanced network infrastructure to support tomorrow's high-bandwidth services. For example, AT&T invested approximately \$21.1 billion between 2008 and 2010 to upgrade and expand its wireless network. Carlton Decl. ¶ 136. Similarly, other major wireless providers—from Verizon to MetroPCS to Leap to Clearwire—have invested billions of dollars in capital upgrades over the past several years, amid the worst recession in decades. This continued and increasing investment underscores the dynamism and competitiveness of the U.S. wireless marketplace. Indeed, this sector has been one of the few bright spots in a still-challenged economy.

Fifth, wireless providers are not only spending billions to improve service; they are also vigorously advertising those improvements to differentiate themselves in the marketplace and win customers. As everyone who watches television or reads a newspaper is aware, wireless providers of all stripes are engaged in unremitting advertising campaigns, touting their network

quality, high speeds, devices, and attractive pricing plans. Indeed, except for the automotive industry, the telecommunications sector (wireline and wireless) outspends every other on advertising. And "wireless service providers" in particular "spend more on advertising than firms in many other industries."

Sixth, competition is both fierce and multi-dimensional, as providers try to win customers with the most attractive combinations of price, service quality, speeds, devices, and operating systems. In the next section, we discuss in greater detail how network service providers compete along these various dimensions. Yet handset and operating system competition further underscores the dynamism and competitiveness of the mobile broadband ecosystem. Wireless providers offer consumers an ever-expanding array of handset options to win and keep their business, and U.S. consumers can now choose among more than 600 handsets produced by dozens of independent handset manufacturers, including Apple, Dell, HTC, Kyocera, LG, Motorola, Nokia, Palm, Pantech, RIM, Samsung, Sharp, and Sony Ericcson. These handsets have widely varying features to accommodate all tastes, including appealing form factors, high-resolution color screens, user-friendly interfaces, simple-to-use features, high-quality cameras, Bluetooth and Wi-Fi connectivity, and the ability to run hundreds of thousands of applications written by third parties.

See Kantar Media Reports U.S. Advertising Expenditures Increased 6.5 Percent in 2010 (Mar. 17, 2011), http://kantarmediana.com/intelligence/press/us-advertising-expenditures-increased-65-percent-2010.

Fourteenth Wireless Report, 25 FCC Rcd at 11492 ¶ 129.

See CTIA, The United States and World Wireless Markets: Competition and Innovation are Driving Wireless Value in the U.S., at 11 (May 2009), attached to Letter from Christopher Guttman-McCabe, Vice President of Regulatory Affairs, CTIA – The Wireless Association, to Marlene Dortch, FCC, GN Docket No. 09-51 (May 12, 2009).

Wireless providers also compete vigorously to offer a diverse selection of operating systems, including Android, Windows Mobile, BlackBerry OS, Apple iOS, Nokia Symbian, and Palm OS. This intense competition is perhaps best illustrated by the rapid ascent of Google's Android operating system. Although it was formally introduced just over three years ago, Android has now become the "most popular smartphone operating system in the United States." Android's success arises both from its innovativeness and from Google's parallel development of the Android Market, which now boasts more than 150,000 Android-compatible apps. Android's extraordinarily rapid growth is also due to the fierce rivalry among wireless service providers, which have added a host of Android-based handsets to their device portfolios and aggressively marketed them to consumers. Indeed, AT&T alone plans to launch twelve new Android devices in 2011.

In short, competition among service providers, handset manufacturers, and operating system developers is strong and mutually reinforcing. All of these firms are constantly creating new services and products—and forming new strategic partnerships and alliances to market those products and services—to keep ahead of their competitors and deliver the most compelling products to consumers.

Ian Paul, Android Edges RIM, Apple as Most Popular Smartphone OS, PC World (Mar. 4, 2011) (citing market analysis by Nielsen), http://www.pcworld.com/article/221358/android\_edges\_rim\_apple\_as\_most\_popular\_smartphone\_os.html.

Andrew Kameka, Android has 150k apps, 350k daily activations, and more notes from Eric Schmidt's MWC keynote, Androinica (Feb. 15, 2011), http://androinica.com/2011/02/android-has-150k-apps-350k-daily-activations-and-more-notes-from-eric-schmidts-mwc-keynote/.

Press Release, AT&T Announces Plans to Deliver Nation's Most Advanced Mobile Broadband Experience (Jan. 5, 2011), http://www.att.com/gen/press-room?pid= 18885&cdvn=news&newsarticleid=31477&mapcode=wireless-networks-general|consumer.

# B. The Marketplace for Wireless Services Will Remain Highly Competitive Following This Transaction.

As indicated by all of these market characteristics—falling prices, accelerating output, technological dynamism, surging investment, ubiquitous advertising wars, and multi-dimensional competition—the U.S. wireless marketplace ranks among the most competitive in the U.S. economy. It will remain so after this merger. We discuss that issue in extensive detail below, but several points warrant emphasis at the outset.

First, approximately three-quarters of Americans live in areas where they may choose among at least five facilities-based wireless providers. That figure, which the Commission calculated last year, does not include mobile virtual network operators ("MVNOs") such as TracFone. Nor does it include new facilities-based entrants such as LightSquared, which has struck deals with Best Buy and others to use its substantial spectrum holdings to serve potentially millions of customers.

Second, T-Mobile USA and AT&T are not close competitors, and other providers already fill—or could easily move to fill—the competitive role T-Mobile USA occupies today. For example, Sprint has re-emerged with a combination of first-to-market 4G services, attractive devices, and aggressive pricing. MetroPCS and Leap offer inexpensive, no-contract service with nationwide coverage; have rapidly expanded into markets covering (between them) more than 200 million people; and have won dramatic gains in total subscribership. See Carlton Decl. ¶ 102; Christopher Decl. ¶ 60-62. According to AT&T's estimates, MetroPCS has now surpassed T-Mobile USA in subscribership in many major markets, including [Begin

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Fourteenth Wireless Report, 25 FCC Rcd at 11448-49 ¶¶ 42-45.